

Introduction: The U.S. Army Corps of Engineers (the Corps)(USACE), Detroit District conducted its annual Lake Winnebago drawdown conference call on January 9, 2007. The meeting began at approximately 9:30am (C.S.T.), with the self-introduction of the attendees. Approximately 10 agencies/users and 50 interested parties participated. Ms. Marie Strum, Assistant Chief of Engineering and Technical Services for the USACE then opened the meeting.

Presentation of Agenda: Mr. Travis Dahl, Chief of the Watershed Hydrology Branch in Detroit, began the meeting by presenting the conference call agenda. This included a discussion on the current and expected winter conditions in the basin, drawdown timing and extent, and an open discussion.

Basin Conditions and Significant Events: Mr. Robert Stanick, Chief of the Fox River Sub-Office (FRSO) in Kaukauna, provided an overview of the hydrologic conditions of the Fox-Wolf-Winnebago system. In addition, he summarized Lake Winnebago regulation activities since the regulation meeting in October.

Mr. Stanick stated that the levels of Lake Winnebago have fluctuated between 2.4 and 2.6 feet relative to Oshkosh Datum (OD), since the Regulation meeting in October 2006. He noted that no significant rainfall events occurred in October 2006. During the last week in November through the first week of December 2006, the FRSO operated gates at the Menasha and Neenah dams in order to maintain the level of Lake Winnebago at the target water level. On December 21, the basin received almost 2 inches of rain. This prompted the FRSO to open several gates at both dams to accommodate the increased supply of water to Lake Winnebago and maintain levels within the desired threshold. As of January 9, 2007, the level of Lake Winnebago was 2.34 ft. (OD) with outflows measured at Appleton near 7,000 cfs and upriver supplies as reported by the River Forecast Center in Chanhassen, MN, were approximately 5,700 cfs.

On the date of the conference call, January 9, 2007, there were 5 gates at the Menasha Dam and 3 gates at the Neenah Dam open. On January 4, 2007 the Corps increased flow in the Lower Fox River to take advantage of the above average temperatures and begin drawdown before colder temperatures and frazil ice conditions occurred. The higher flows required for drawdown are problematic for industrial users when ice forms and clogs intakes. However, no significant problems occurred as a result of this activity.

Mr. Arthur Techlow, from the Wisconsin Department of Natural Resources (WDNR) is the USACE's primary contact for basin ice conditions during the winter months. He reported that the significant ice which had developed in shallow bays and marshes in December had dwindled from about 7 inches to less than 1 inch at this time. He also indicated that Lake Winnebago did not have a significant ice cover on the date of the call, January 9, 2007.

Expected Conditions: Mr. Brian Hahn from the National Weather Service reported the only significant snow in the basin was about two inches near the headwaters of the Wolf River in Langlade, Forest and Oneida counties. He also stated that the average

temperature in the month of December at Green Bay was nine degrees Fahrenheit above normal. The basin's 6-10 day temperature and precipitation forecast are near normal while the longer-term (8-14 day) and 3-month temperature are forecasted to be above average with precipitation at or below average.

Proposed Strategy: Mr. Dahl explained that, ideally, the Corps waits until the lake has a solid ice cover before starting the seasonal drawdown. However, he expressed concern regarding the likelihood of ice cover forming soon. He indicated that the USACE had recently made gate changes to increase Lake Winnebago outflows to begin a slow drawdown. Based on our current plan of action, the level of Lake Winnebago should be near 2.0 ft. (OD) by 1 February 2007 and at the proposed drawdown target of 1.68 feet OD by 1 March 2007. The USACE and WDNR will closely monitor basin conditions during this time and make appropriate adjustments as needed to meet our target goals.

General Concerns: Mr. Art Techlow (WDNR) stated that a gradual drawdown at this time would not have an adverse impact on the system. With no significant ice development predicted for the immediate future, a gradual drawdown at this time is better than waiting for a full ice cover to form before resuming drawdown.

Mr. Tim Hamblin Director of the Neenah Water Department raised concern over the effects of the closing of a 72 inch pipe at the Glatfelter Mill. He was referred to Mr. Stanick to further discuss the potential effect of the pipe on outflows.

A representative from Kaukauna Utilities, Bruce Gomm, stated that his company had recently experienced some incidents of frazil ice development which required short-term unit shutdowns. Mr. Frank Krueger of Neenah Paper, Inc., concurred with the proposed gradual drawdown plan. He also expressed his gratitude to the USACE for providing him with advance notice for gate changes at the Neenah Dam.

Major topics discussed in the open forum included recent Lower Fox River ice flows, Lake Winnebago ice shoves, sediment dynamics, moving sand bars, high water levels prior to drawdown, and low spring water levels.

Several residents expressed concern over the higher water levels prior to drawdown. They experienced property damage due to ice shoves caused by the unseasonable warm weather. The reason for the ice shoves this December was that ice formed in early December with the cold temperatures but then temperatures warmed and the ice melted, producing ice shoves and some reported shoreline damage. This was an unusual condition due to the unseasonably mild weather in December. The Corps does not expect damage to this extent in years with normal temperatures.

Ms. Marie Strum offered a brief overview of the water levels and operations over the last two years and explained the impact of dry conditions on the USACE's ability to maintain its normal summer target of 3.0 feet OD.

After a review of the drawdown objectives, Ms. Strum ended the conference call and thanked participants for their feedback. Participants were encouraged to visit the Corps' website for much information on water levels, flows, and meeting notices. The website address is: www.lre.usace.army.mil/glhh/winnebago.